Calhoun Road Improvements

North Ave. to Capitol Dr.

Public Involvement Meeting #2

August 10, 2017





Meeting Purpose

- Introduce the project team
- Review the project background
- Recap input received at Public Meeting #1
- Explain project purpose and need
- Present improvement alternatives
- Gather feedback from you
- Answer questions



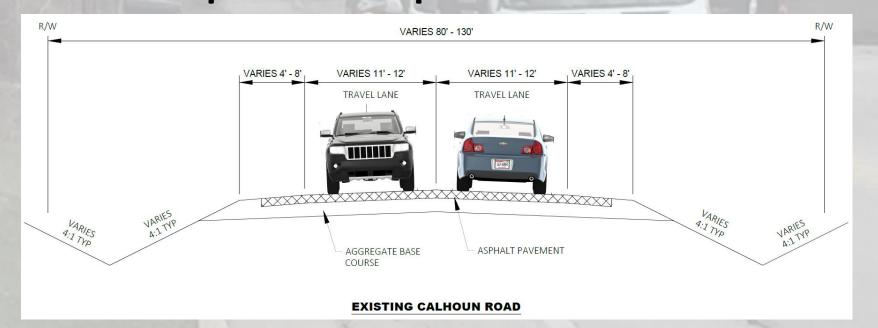
Project Team

- City of Brookfield:
 - Tom Grisa Director of Public Works
 - Jeff Chase City Engineer
- R.A. Smith National:
 - Brad Severson Project Manager
 - Doug Senso Design Engineer
 - Dan Whitefoot Design Engineer
 - Pat Hawley Traffic Engineer
 - Dan Dupies Environmental Specialist



Project Background

- Project limits: North Ave (County M) to Capitol Dr (WIS 190)
- 2016 traffic: 16,400 to 13,600 vehicles per day
- 2041 traffic: 18,900 to 15,200 vehicles per day
- Posted speed: 35 mph





Public Involvement Meeting #1 Recap

Held on May 17, 2017

 47 residents, property owners, local officials, and business representatives

 Provided overview of the roadway deficiencies in the Calhoun Road corridor



Issues Raised by You at PIM #1

- Difficulty getting onto Calhoun from side roads and driveways
- Safety concerns with slowing/waiting to turn into side roads and driveways
- The Burleigh intersections require some type of control

Drainage issues



Issues Raised by You at PIM #1

Railroad crossings—improved, but still problematic

Desire for bike and pedestrian facilities

Sight distance concerns

Pavement condition



Purpose of the Project

- Improve the efficiency of Calhoun Road and intersecting side roads
- Remove deficiencies that compromise safety and lessen the dependability of the road.

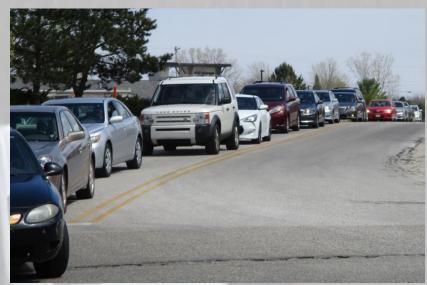






Project Needs – Improve Efficiency

- Accommodate current and future traffic
- Be consistent with Regional Transportation Planning
- Remove turning vehicles from through lanes







Project Needs – Improve Efficiency

- Intersection operations
 - Currently, 7 out of 15 intersections experience unacceptable delays
 - In the design year (2041), 12 out of 15 intersections will experience unacceptable delays
- Railroad crossing backups
 - Up to 0.5 mile





Project Needs – Address Deficiencies

 Fix deteriorated pavement

 Provide adequate sight distances

 Eliminate roadside hazards







Project Needs – Address Deficiencies

- Resolve rough railroad crossings
- Deliver continuous bike and pedestrian facilities
- Provide safe,
 efficient emergency
 services route







Alternatives Considered

No-Build

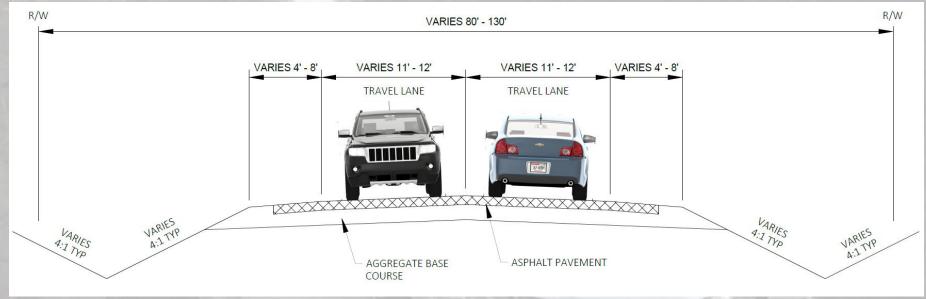
Three-Lane Two-Way Left Turn Lane

Four-Lane Undivided

Four-Lane Divided



No-Build Alternative



- Maintains existing roadway geometrics
- May include routine maintenance
- No real estate needs



No-Build Alternative

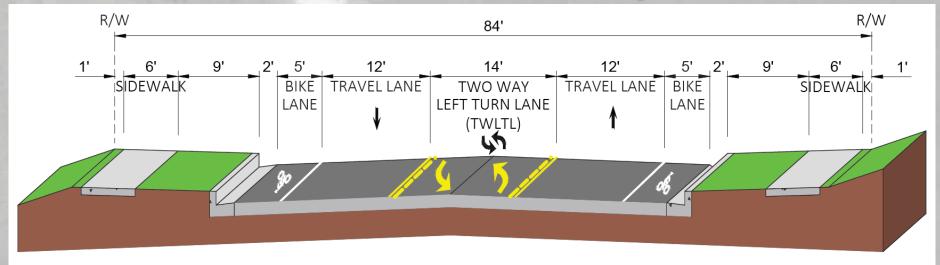
- Advantages:
 - No real estate needs
 - No wetland or floodplain impacts
 - Lowest construction cost
- Disadvantages:
 - 12 intersections with unacceptable delays
 - 25.7% predicted increase in crashes
 - No new turn lanes
 - Queues from the railroad crossing will exceed 4000 feet, extending beyond North Avenue

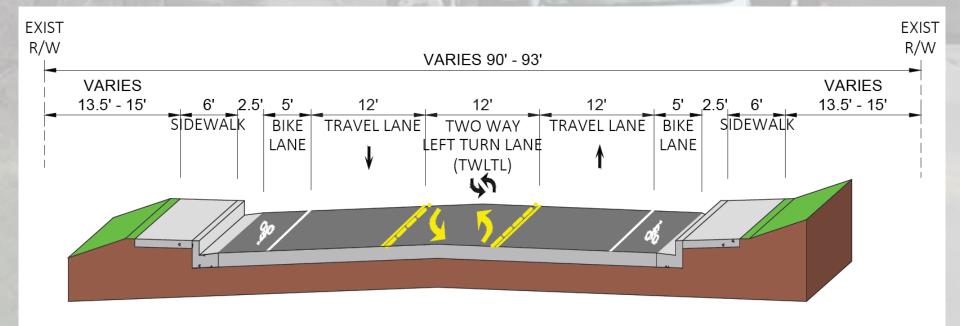


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Alt 1: Three-lane Two-Way Left Turn Lane







Alt 1: Three-Lane TWLTL Advantages

 Less real estate, floodplain, and wetland impacts than other build alternatives

Provides turn lanes at intersections

 Separates northbound and southbound through lanes



Alt 1: Three-Lane TWLTL Disadvantages

 3 intersections with unacceptable delays (Pick N Save / Sunnycrest Drive, Burleigh Road, Pheasant Drive)

 10.8% predicted increase in crashes (25.7% increase for no-build alternative)

 Queues from the railroad crossing will exceed 4000 feet, extending beyond North Avenue



Alt 1: Three-Lane TWLTL Disadvantages

 Not consistent with Regional Transportation Planning

 Queues from new traffic signal at Burleigh Place would block Martha Dr, Country Ln, and Vanderbilt St

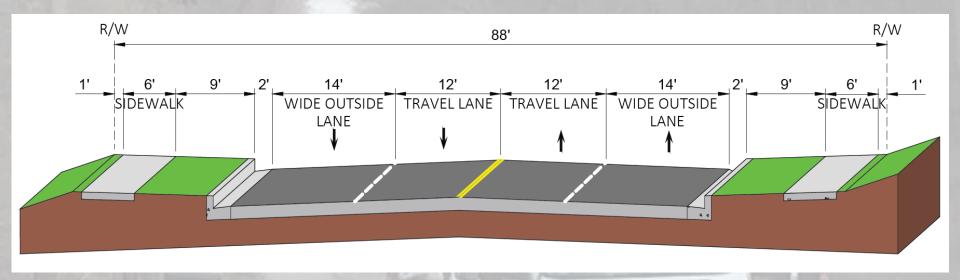
 Does not allow safe two-stage left-turns from side roads

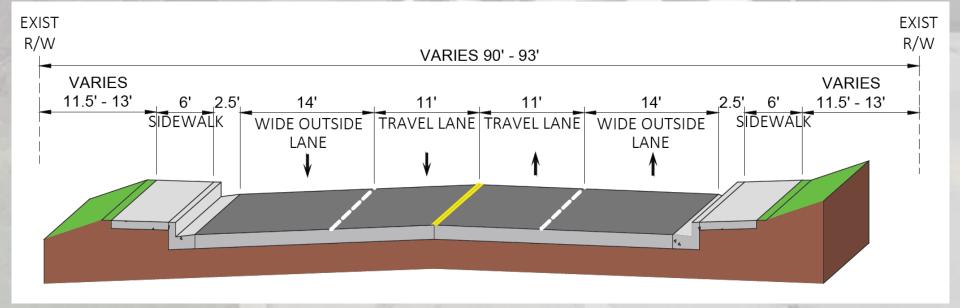


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Alt 2: Four-Lane Undivided







Alt 2: Four-Lane Undivided Advantages

- Moderate real estate, floodplain, and wetland impacts
- Consistent with Regional Transportation Planning
- Queues from the railroad crossing will be less than 2000 feet (less than half of the no-build and three-lane TWLTL alternatives)



Alt 2: Four-Lane Undivided Disadvantages

 5 intersections with unacceptable delays (St. James Rd, Vanderbilt St, Burleigh Rd, River Birch Drive, and Pheasant Dr)

 Does not allow two stage left-turns from side roads

Will not significantly reduce side road delays



Alt 2: Four-Lane Undivided Disadvantages

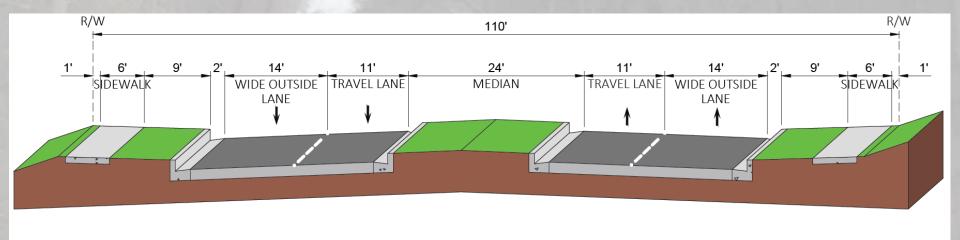
- Least safe alternative
 - 29.4% predicted increase in crashes (25.7% increase for no-build alternative)
 - No left turn lanes at intersections
 - No separation between northbound and southbound through lanes

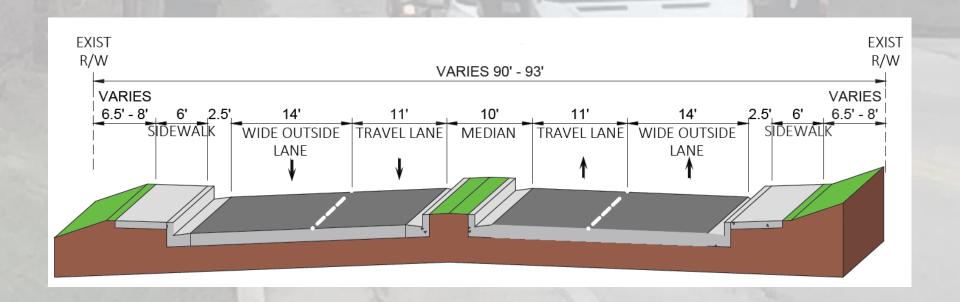


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Alt 3: Four-Lane Divided







Alt 3: Four-Lane Divided Advantages

- All intersections would have acceptable operations
- Allows two stage left-turns from side roads
- Reduces side road delays and queues
- Consistent with Regional Transportation Planning



Alt 3: Four-Lane Divided Advantages

- Queues from the railroad crossing will be less than 2000 feet (less than half of the no-build and three-lane alternatives)
- Safest alternative
 - 20.8% predicted decrease in crashes
 - Provides left turn lanes at side roads
 - Separates northbound and southbound through lanes
- Preferred by emergency services



Alt 3: Four-Lane Divided Disadvantages

- Restricts left turns at some driveways and side roads (advantage or disadvantage?)
- Largest impacts to:
 - Real estate
 - Floodplain
 - Wetlands



Category's Lowest Impact or Best Result

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Alternative Comparison

Category	No Build	Alternative 1 3-Lane TWLTL	Alternative 2 4-Lane Undivided	Alternative 3 4-Lane Divided				
Impacts to the Environment								
Wetland Area Disturbed	0.00 Acres	0.75 Acres	0.83 Acres	1.38 Acres				
Floodplain	0.00 Acres	0.08 Acres	0.10 Acres	0.18 Acres				
New Right of Way Required	0.00 Acres	0.58 Acres	1.14 Acres	2.89 Acres				
Potential Residential Relocations	0	1	1	1				
Ability to Meet Future Traffic (2041) Needs								
Number of Intersections with unacceptable delays	12	3	5	0				
Queuing along Calhoun Road at railroad crossings	4000 feet	4000 feet	2000 feet	2000 feet				
Accommodates 2-Stage Left Turn Movements from Side Streets	No	No	No	Yes				
Near and Long Term Safety								
Predicted Annual Change in Crashes (Compared to 2016)	+25.7%	+10.8%	+29.4%	-20.8%				
Provides Left Turn Lanes at Side Street Intersections	No	Yes	No	Yes				
Separates Northbound and Southbound Through Lanes	No	Yes	No	Yes				
Addresses Route Importance								
Consistent with SEWRPC Transportation Improvement Plan	No	No	Yes	Yes				
Preferred by Emergency Responders (Fire & Police)	No	No	No	Yes				



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Next Steps

We are here in the process.

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Data Gathering Environmental Investigations	Develop/ Refine/ Evaluate Alternatives	Select Preferred Alternative	Environmental Document Preliminary Design	Final Design Real Estate Acquisition	Project Bidding & Award Construction



Comments Welcome

 Project Website: http://tinyurl.com/calhounrd

Submit comments or mail to:

Doug Senso, P.E.

R.A. Smith National, Inc.

100 W. Lawrence Street, Suite 412

Appleton, WI 54911-5754

(920) 843-5731

doug.senso@rasmithnational.com



THANK YOU FOR ATTENDING

GENERAL QUESTIONS